
FISC CDM Mirror Manager

User's Guide

Version 3.2

(For Mirror Manager V3.2)

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CHAPTER 1 INTRODUCTION

What is Mirror Manager

Mirror Manager is a CD/DVD image creation and management utility. Mirror Manager can manage and remotely duplicate CD images into FISC CDM network-ready CD Mirror Servers. Its **Image Builder** function lets you collect files and archive them as CD images in FISC CDM servers.

You must have a computer equipped with a CD-ROM drive for you to install the utility. The utility reads a CD from a local CD-ROM drive and creates an image on a HD of a remote CD Mirror Server. With this utility, you can load CD images remotely into a CD-ROM server.

The Image Builder function allows you to collect files and archive them as CD images in FISC CDM servers. With this function, FISC CDM servers become network appliances for archiving. It is especially useful for copying less-frequently-modified data into FISC CDM servers.

Once you create a CD image on a hard disk of the CD-ROM server, it can be shared across the network. Users won't feel any difference whether they are accessing a CD or a CD image. A hard disk in a CD-ROM server can store up to 80 CD images. Logically, a hard disk can be viewed as an 80-disk CD changer. Creating a CD image on a hard disk is just like putting a CD into a CD changer.

You can also use Mirror Manager to browse CDs in all CD-ROM servers on the network easily. Mirror Manager will find CD-ROM servers automatically and display in a tree view. System administrators will find it very useful if there are more than one CD-ROM server on the network.

CHAPTER 2 INSTALLATION

System Requirement

- IBM PC or compatible with 80486 processor or higher
- At least 4 MB of RAM (8 MB is recommended)
- Minimum 5MB of free hard disk space
- VGA or higher resolution monitor
- Microsoft Windows 95/98 or Windows NT

Installing NetBEUI Protocol and Client for Microsoft Networks

Mirror Manager communicates with FISC CDM Server through the SMB protocol. You must install **Client for Microsoft Networks** and the **NetBEUI** protocol in Windows 95/98.

Installing Mirror Manager

You are ready to install this utility if you have **Client for Microsoft Networks** and **NetBEUI** installed in your computer. Please follow the steps below to install Mirror Manager.

1. Go to where Mirror Manager installer is located, such as A:\ or C:\Download.
2. Execute "Setup.exe"
3. It will bring up the following screen.



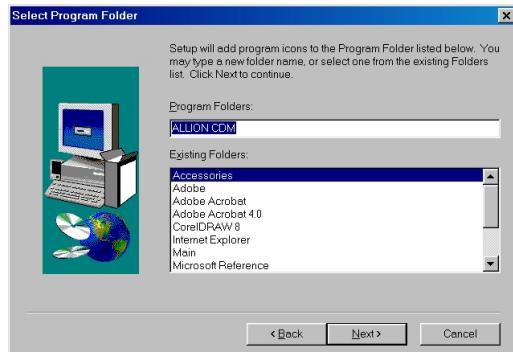
Press **Next** to continue.

4. You will see the screen below.

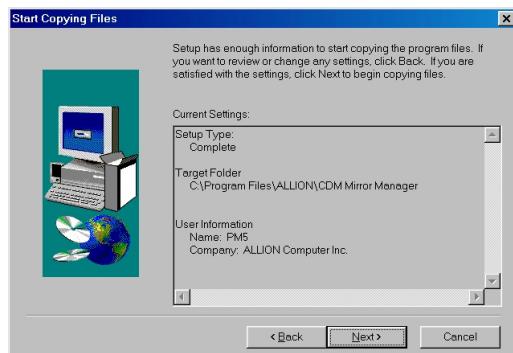


If you want to install the utility into another directory, please click **Browse** and choose the directory you want. Press **Next** to proceed.

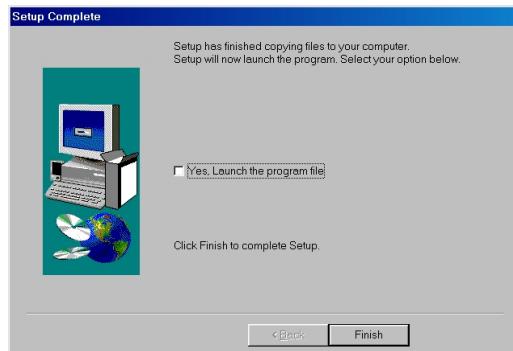
5. Then the Setup Wizard will ask you to the name of the Program Folder. Input and press **Next**.



6. You will see the following screen. Press **Next** to start copying files into your computer.



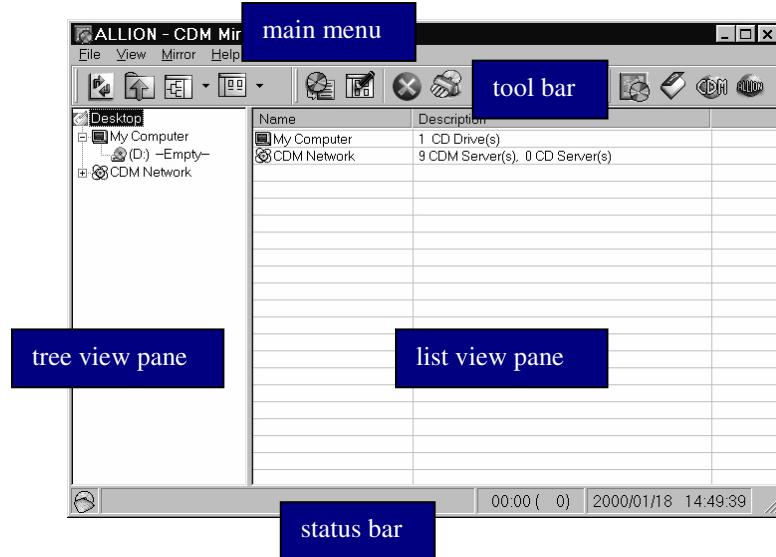
7. Then you will see the screen below.



Check the box if you want to launch the program after installation. Last, please click the **Finish** button to end the installation.

CHAPTER 3 BROWSING CD-ROM SERVERS ON THE NETWORK

After execution, the Mirror Manager will bring up its main screen as below.



On the screen, there are a main menu, a tool bar, a tree view pane, a list view pane and a status bar.

On the tree view pane, you can see a list of all the CD servers found by the Mirror Manager on the network. Also listed is **My Computer** as in Windows Explorer. If you click on any item on the tree view pane, its content will show up on the list view pane.

The status bar indicates Mirror Manager's status & information. From the left to the right on the status bar, it shows job status, help or job progress, mirror time, and date/time.

You can browse the contents of each FISC CDM server just as in Windows Explorer. For example, the list view pane (the pane to the right) shows all image slots if you click a hard drive on the tree view pane (the pane to the left).

The detailed information of functions in the main menu and the toolbar are shown below.

Main Menu

File	
Exit	Exit the program
View	
Tree View Mode	Select the display mode of the tree view pane: Full expand and Full shrink
List View Mode	Select the display mode of the list view pane: Large Icon , Small Icon , List and
File toolbar	Hide/display the file toolbar
Mirror toolbar	Hide/display the mirror toolbar
Help toolbar	Hide/display the help toolbar
Status toolbar	Hide/display the status toolbar
Up directory	Move cursor to upper directory
Refresh directory	Rescan all items and refresh the window
Mirror	
Mirror CD to server...	Pops up a menu for configuring and starting a mirror task
Image Builder	Start the Image Builder to select files/folders and create an image
Stop current job	Stop the current mirroring job
Delete mirror slot	Delete the slot on HD for storing CD
Help	
Help Content	Open the Help window
Index & Content	Help Index
ALLION Home Page	Go to http://www.allion.com
FISC CDM Server Home Page	Go to the homepage of the FISC CDM server you select
About Mirror Manager	Show the About screen of Mirror Manager

Tool Bar

File toolbar

	Refresh directory	Rescan all items and refresh current display
	Up directory	Move cursor to upper directory
	Tree View Mode	Select the display mode of the tree view pane: Full expand and Full shrink
	List view mode	Select the display mode of the list view pane: Large icon , Small icon and Detail

Mirror toolbar

	Mirror CD to server...	Configure mirror options and create an image
	Image Builder	Start the Image Builder to select files/folders and create an image
	Stop current job	Stop the current mirroring job
	Delete mirror slot	Delete the CD/DVD image in the selected slot

Help toolbar

	About Mirror Manager
	Open Mirror Manager help book
	Go to FISC CDM server home page
	Go to ALLION home page

Status Bar

Status Icon



Ready status. If the CD is moving, it means that a mirroring job is going on.



A mirroring job is scheduled.



A CD/DVD image was duplicated successfully.



It failed to duplicate a CD/DVD image.

Help/Job Progress

If a mirroring job is going on, it shows the job progress in the second column of the status bar. Otherwise, it shows the help message of the selected function.

Mirror Time

In the third column of the status bar, it displays the elapsed time of the mirroring job. 02:50 (170) means 2 minutes and 50 seconds; (170) means 170 seconds.

Date & Time

In the fourth column of the status bar, it shows the system date and time.

CHAPTER 4 DUPLICATING A CD IMAGE REMOTELY

This chapter describes how to duplicate a CD image from a local CD-ROM drive onto a hard disk of FISC CDM server.

First, execute Mirror Manager and click on the “**Mirror CD to server**” icon . It will bring up the “**Mirror CD to server**” screen as below.



Second, configure the options. The details of the options are explained later.

Third, click the “**Go!!**” button to command Mirror Manager to remotely mirror the CD into the FISC CDM server.

Source:

Choose the source CD-ROM drive here. Pull down the list box and you will see all the local CD-ROM drives. Choose one in the list box.

CD Media Type:

Display the media type of the source CD. Please refer to **Appendix: Supported CD Format & CD Drive** for more information about CD formats.

CD Size in Mirror:

Display the actual size to be allocated by the FISC CDM server for storing the CD image.

Target:

Click the “CDM Server” list box. You can choose a CD server into which you would like to mirror CD. After you choose one, the information will be shown in the right: “Total Free Slot” and “Max. Free Size”.

Total Free Slot:

Display the number of total free slots available on the selected FISC CDM server. Please note that each hard drive on a FISC CDM server can hold 80 slots at maximum.

Max. Free Size:

Display the aggregate free space available on all the hard drives in the selected CDM server.

Method:

The following options specify the way to put the CD image:

Auto & Smart Mode

The CD server will choose an available hard drive and slot automatically, and check for a duplicate CD image pre-existing on any of the hard drives. If a duplicated image is found, it will simply bypass mirroring the CD.

Auto & Force Mode

The CD server will choose the available hard drive and slot automatically, and will NOT check if there is a pre-existing duplicate CD image.

Manual Mode

You can select the hard drive and the slot number manually. The duplicate CD check will not be performed.

Time:

This option specifies the time to start the CD image creation.

Share Control

Default Name

If this option is checked, it automatically sets the name for the created image. Examples of default names are CD1001, CD4001.

Customized Name

If this option is checked, it uses the name specified in the input box below for the created image.

What is a share name?

A share name is the name of the CD (image) shown to network users when they browse FISC CDM servers through Windows Explorer or Internet browsers.

Share Comment

Please enter the comment for the duplicated CD/DVD image here.

What is a share comment?

A share comment is additional information with a shared folder on network. You can see share comments if you view these shared folders in **Details** mode on Network Neighborhood.

Unlimited Users

You can specify whether to set the limit on the number of users for simultaneous access of the created CD/DVD image. Select this option to set no limit on this.

Specify Max. Users

By selecting this option, you can choose in the list-box to specify how many users are allowed to access the created CD/DVD image at the same time.

Access Password & Confirm Password

You can set a password for accessing the created CD/DVD image. Please enter the password in both the **Access Password** and **Confirm Password** fields.

Passwords in Mirror Manager

There are two types of authorization passwords in Mirror Manager: Administrator password and Mirror Manager password. Administrator password is the most powerful. With just one password you can create and delete any CD/DVD images as you like. Mirror Manager password allows a normal user to create a CD/DVD image and set the image's access password. A normal user cannot delete a CD/DVD image without entering the image's access password. You can set the administrator password and the Mirror Manager password in the administration homepage of the CD server, under the Server Settings menu item.

Options:

Lock CD door

If enabled, the door of the source CD-ROM drive cannot be opened by pushing the eject button on the CD-ROM drive during the mirroring operation.

Eject CD

CD server will eject CD when the mirror job is finished. This option is valid for both successful or failed mirror operations.

Prompt if Replace

If there is an attempt to overwrite an occupied slot using Manual Mirror Method, FISC CDM server will prompt a message dialog box for

replacement when this parameter is selected. Otherwise, FISC CDM server will overwrite the selected slot without notice.

Reset to Default:

This option resets to the default factory settings.

CHAPTER 5 ARCHIVING FILES

Using FISC CDM for Archiving

Step 1. Invoke Image Builder

Image Builder is an important function of Mirror Manager. It is used mainly for you to select files/folders and archive them as a CD image in FISC CDM servers.



To invoke Image Builder, please click  on the toolbar or select **Mirror/Image Builder** in the main menu of Mirror Manager.

Step 2. Select Files/Folders – Drag & Drop

By default, Image Builder brings up a Windows Explorer when it is invoked. You can also disable this feature by un-checking **Options/Run Windows Explorer when open** in Image Builder.

To select files/folders is easy. Just drag the files/folders from Windows Explorer, then drop them in Image Builder. You can see Image Builder processing when these files/folders are drag-n-dropped. The root folder that keeps these files/folders is called a **container**.

What is a container?

In Image Builder, a **container** records the path names and relative information of all the selected files/folders. All information in a **container** can be saved into a file with the extension **.CIS**. It facilitates your archiving tasks by keeping information of the selected files/folders to be archived.

Step 3. Validate File/Folder Information

Before you create a CD image (i.e., archive these files) in FISC CDM, it is recommended to validate the files/folder in the container first. To validate is to check whether the files/folders information in the container is consistent to the properties of the source files/folders. If not, you can choose to update the information in the container or simply ignore.



To validate, please click  in the toolbar or select in the main menu of Image Builder.

This 3rd step is optional

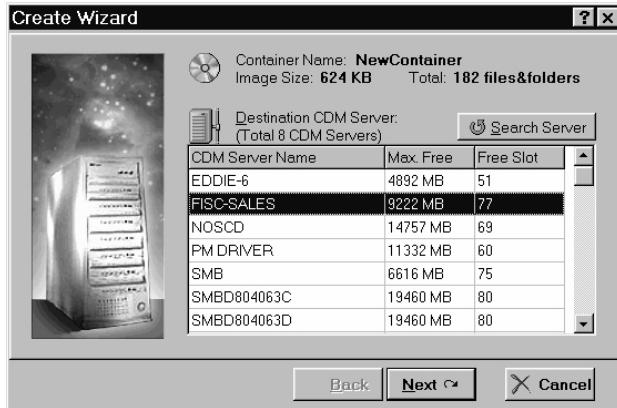
Step 4. Create a CD Image in a FISC CDM Server

Now you are prepared to put those files into a FISC CDM server.



Click **Builder/Create Image** on the toolbar of Image Builder or select **Builder/Create Image** from the main menu. It pops up a dialog box that inquires whether to validate or not. You can choose **No** if you just validated the container. Then it brings up the Builder Wizard to guide you through the process as below.

1. Select a FISC CDM server that will store the created image. Here it lists all FISC CDM servers, free space and free slots in them.

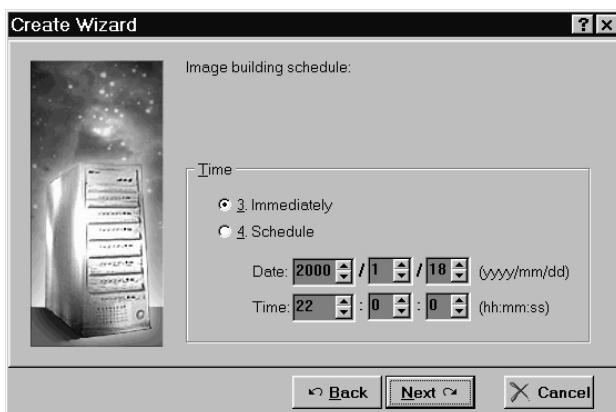


Note: you can click the “Search Server” button to re-scan the network for CD servers

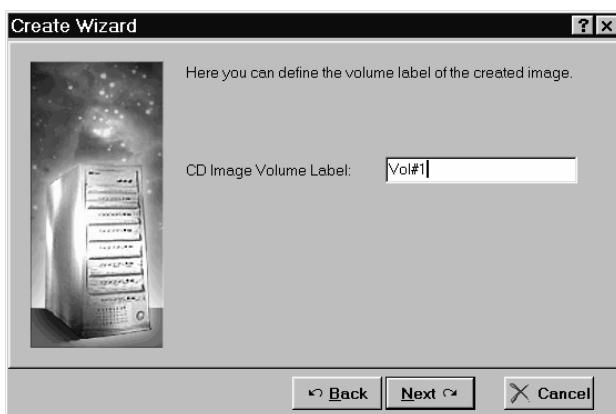
2. Then choose a destination slot in the FISC CDM server. The program will do it automatically if you click **Auto & Force**. You can choose one by yourself if you click **Manual Select**.

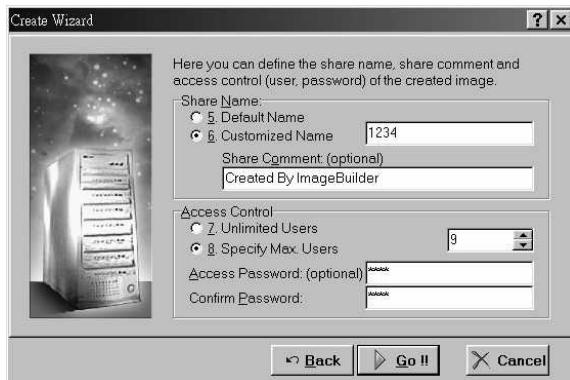


3. Next, please choose when to start the image creation: you can choose to start **immediately** or arrange a **schedule**.



4. Next, please enter the volume name of the created CD/DVD image. Then please also enter the share name and share comment.

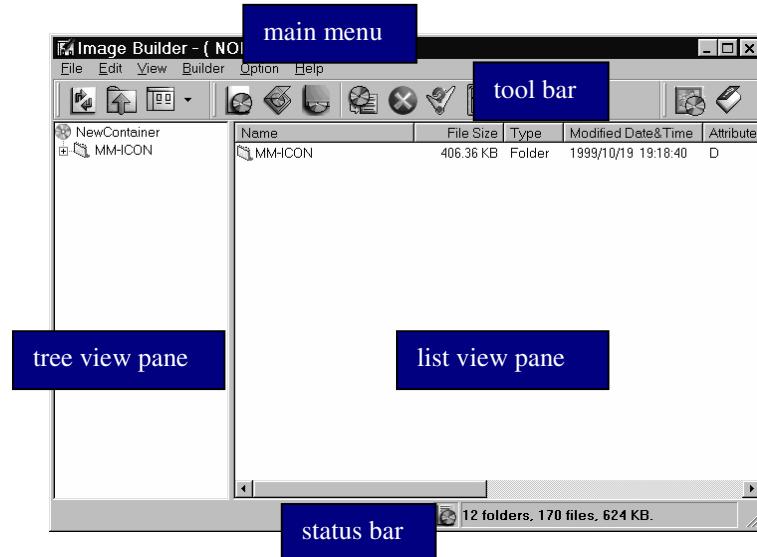




5. On the screen, you can also give the password for accessing the created CD/DVD image and/or set the limit on the number of users allowed to access simultaneously.
6. Last step, press the “Go!” button to start the job.

Image Builder

In this section, it explains the components of Image Builder in detail.



List View Pane & Tree View Pane

The layout of the view panes is similar to that of Windows Explorer. You can double-click a folder to display its content. The drag-n-drop operation is also similar.



To change the view style of the list view pane, please click  on the toolbar. It can be viewed as **Large Icons**, **Small Icons**, **List** or **Detail**.

In **Detail** view, it displays detailed information of the files/folders: file names, file sizes, file types, date & time of last modification, file attributes, allocated sizes and source pathnames.

Main Menu

File

New Container

Create a new empty container file

Open Container	Open an existing container file
Save Container	Save the current container file
Save Container As...	Save the current container file with a different name
Exit	Exit the program

Edit

New Folder	Create a new empty folder
Cut	Cut file/folder(s)
Copy	Copy file/folder(s)
Paste	Paste into the current folder
Delete	Delete the selected file or folder.
Rename	Change the name of the select file/folder
Select All	Select everything in the list view pane

View

Toolbar	Hide/display the toolbar
Status bar	Hide/display the status bar
Large Icon	Display files/folders as large icons
Small Icon	Display files/folders as small icons
List	Display files/folders as a list
Detail	Display files/folders in detail
Up directory	Move cursor to upper directory
Refresh directory	Rescan all items and refresh current display

Builder

Create Image	Start a wizard for guiding the user to create a CD image storing all the files/folders in the current container.
Stop	Stop the current job of image creation
Validate	Check whether the file/folder information in the current container is still valid.

View Log

view the log of the validation process

Option

Run Windows Explorer when open

If you check this option, Image Builder brings up a Windows Explorer when it is invoked. The default is **Checked**.

Show Validate dialog when creating image

If you check this option, it pops up a dialog inquiring whether to validate or not when you click “Create Image” to bring up the Builder Wizard. The default is **Checked**.

Help

Help Content

Display the related help information

Help Topics & Index Search...

Open the Help window and show the indexes

Online Help-book

Open the Help window

About CDM Mirror Manager

Show the About screen of Mirror Manager

Toolbar



Refresh

Rescan all items and refresh current display



Up directory

Move to the directory one level up



Toggle view modes

Change the view mode of the list view pane between Large Icon, Small Icon, List & Detail



New container

Create a new empty container file. A container records all the file/folder information to be created on an image



Open container

Open an existing container file



Save container

Save the information of all the files/folders in the current container into a file

 Create Image	Start a wizard for guiding the user to create a CD image that stores all the files/folders in the current container
 Stop current job	Stop the process of creating an image
 Validate current container	Check whether the file/folder information in the current container is still valid. If not, a warning dialog box will pop up. You can choose to update the container information, or simply ignore.
 View log	View the log of the validation process
 About CDM Mirror Manager	Show the About screen of Mirror Manager
 Online Help-book	Open the Help window

Status Bar

From left to right, the status bar is divided into three parts: hint/job progress, modified flag, and container information.

Hint/Job Progress

If no CD image is being created, it shows the hint (short help information) of the function where the cursor is located.

If a CD image is being created, it shows the progress of the creation.

Modified Flag

The icon indicates whether the current container is modified or not. It reminds that the container information needs to be saved.

 means "Not Modified Yet";  means "Modified".

Container Information

On the right side of the Status-bar, it shows the information of the container, including the total number of files/folders in the container, and the allocated size of all files/folders.

If the status bar shows “30 folders, 1249 files, 3590KB”, the container has 30 folders and 1249 files. The allocated size of all files in the container is 3590 Kbytes.

APPENDIX: SUPPORTED CD FORMAT & CD DRIVE

The following are the CD formats supported by Mirror Manager.

Single session:

CD Format	Format displayed in the “Media Type” field on the List View pane	Format displayed in the “CD Media Type” field on the “Mirror CD to server” menu
CD-Data (Yellow Book)	CD-Data	CD-Data
CD-Audio (Red Book)	CD-Audio	CD-Audio
CD-Mixed (Yellow Book)	CD-Mixed	CD-Mixed
CD-XA (Yellow Book)	CD-XA	CD-XA
Video CD (White Book)	CD-XA	CD-Video
Photo CD	CD-XA	CD-Photo
DVD-ROM	CD-Data	DVD-ROM

Multisession:

CD Format	Format displayed in the “Media Type” field on the List View pane	Format displayed in the “CD Media Type” field on the “Mirror CD to server” menu
CD-Data	CD-Multi*	CD-Data*
CD-Audio	CD-Multi*	CD-Audio*
CD-Mixed	CD-Multi*	CD-Mixed*
CD-XA	CD-Multi*	CD-XA*
Video CD	CD-Multi*	CD-Video*

Photo CD	CD-Multi*	CD-Photo*
CD-Extra (Blue Book)	CD-Extra*	CD-Extra*

*: There is an asterisk appended at the end of the word if the CD (or CD image) is a multisession CD.